

I claim:

1. A moisture detector comprising:
 - a. a strip sensor comprising:
 - i. a strip substrate which when dry has a dry electrical resistance and when wet has a wet electrical resistance;
 - ii. conductor strips extending along the length of the strip substrate and electrically separated from each other by the strip substrate;
 - b. a microcontroller connected to the conductor strips and programmed to detect a change in the resistance of the strip substrate between the conductor strips as a result of the presence of moisture on the strip substrate.
2. The moisture detector of claim 1, wherein the strip substrate is an untreated polyester fabric.
3. The moisture detector of claim 1, wherein the strip substrate has a resistance that varies with the amount of moisture absorbed by the strip substrate.
4. The moisture detector of claim 3, wherein the microcontroller is programmed to identify a threshold resistance for the strip substrate that is indicative of the presence of moisture.
5. The moisture detector of claim 3, wherein the strip substrate has a dry resistance greater than 6 megohms.
6. A moisture detector comprising:
 - a. a spot sensor comprising:
 - i. a spot substrate which when dry has a dry electrical resistance and when wet has a wet electrical resistance;
 - ii. conductor electrodes embedded in the spot substrate and electrically separated from each other by the spot substrate;

- b. a microcontroller connected to the conductor electrodes and programmed to detect a change in the resistance of the spot substrate between the conductor electrodes as a result of the presence of moisture.
- 7. The moisture detector of claim 6, wherein the spot substrate is dry wall.
- 5 8. The moisture detector of claim 6, wherein the spot substrate has a resistance that varies with the amount of moisture absorbed by the spot substrate.
- 9. The moisture detector of claim 8, wherein the microcontroller is programmed to identify a threshold resistance for the spot substrate that is indicative of the presence of moisture.
- 10. The moisture detector of claim 8, wherein the spot substrate has a dry resistance greater than 6 megohms.
- 10 11. A moisture detection system comprising:
 - a. a plurality of moisture sensors, each sensor comprising:
 - i. a substrate which when dry has a dry electrical resistance and when wet has a wet electrical resistance;
 - 15 ii. conductors attached to and separated by the substrate;

- b. a microcontroller connected to the conductors of the plurality of sensors and programmed to detect a change in the resistance of the substrate between the conductors as a result of the presence of moisture and to identify the moisture sensor of the plurality of moisture sensors where the presence of moisture exists.
- 5 12. The moisture detector of claim 11, wherein the substrate is an untreated polyester fabric.
- 13. The moisture detector of claim 11, wherein the substrate has a resistance that varies with the amount of moisture absorbed by the substrate.
- 14. The moisture detector of claim 13, wherein the microcontroller is programmed to identify a threshold resistance for the substrate that is indicative of the presence of moisture.
- 10 15. The moisture detector of claim 13, wherein the substrate has a dry resistance greater than 6 megohms.
- 16. A method for detecting moisture in a closed environment comprising the steps of:
 - a. placing a moisture sensor along a path where moisture may exist wherein the sensor comprises:
 - 15 i. a substrate which when dry has a dry electrical resistance and when wet has a wet electrical resistance;
 - ii. conductors attached to and separated by the substrate;
 - b. connecting a microcontroller to the conductors and programming the microcontroller to detect a change in the resistance of the substrate between the
20 conductors as a result of the presence of moisture.
- 17. The method of claim 16, wherein the substrate is an untreated polyester fabric.
- 18. The method of claim 16, wherein the substrate has a resistance that varies with the amount of moisture absorbed by the substrate.
- 19. The method of claim 18, wherein the microcontroller is programmed to identify a
25 threshold resistance for the substrate that is indicative of the presence of moisture.
- 20. The method of claim 18, wherein the substrate has a dry resistance greater than 6 megohms.